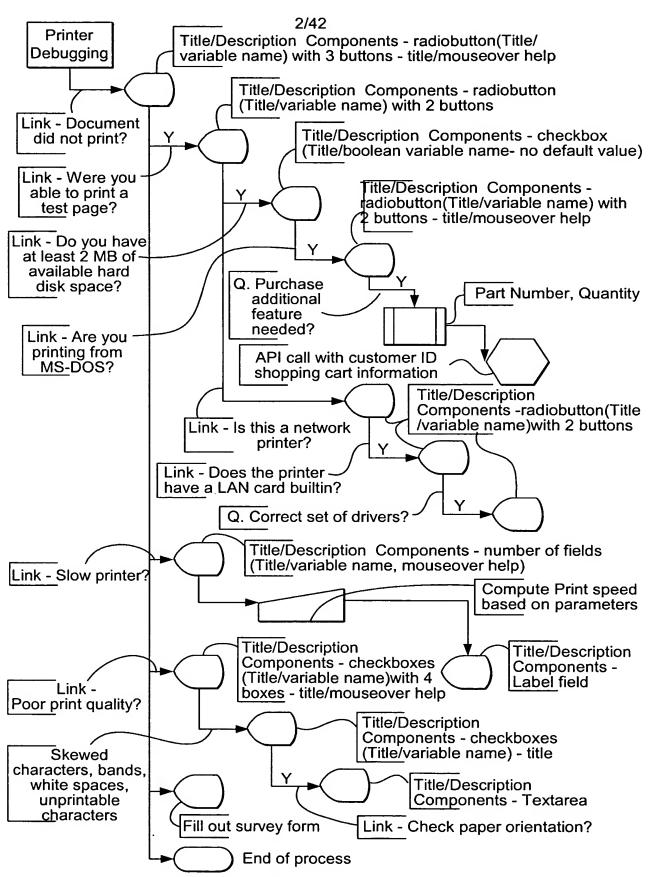


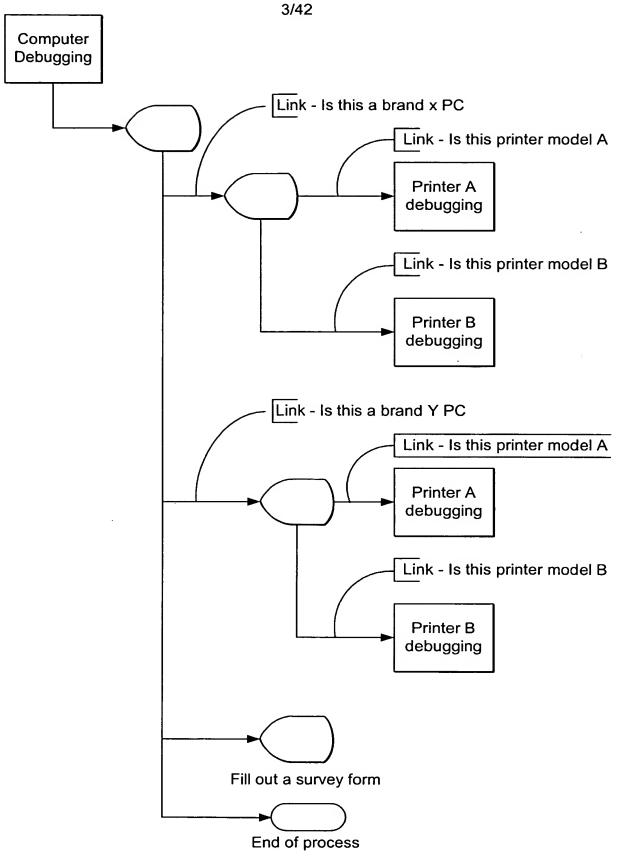
Sample Business Process

FIG. 1

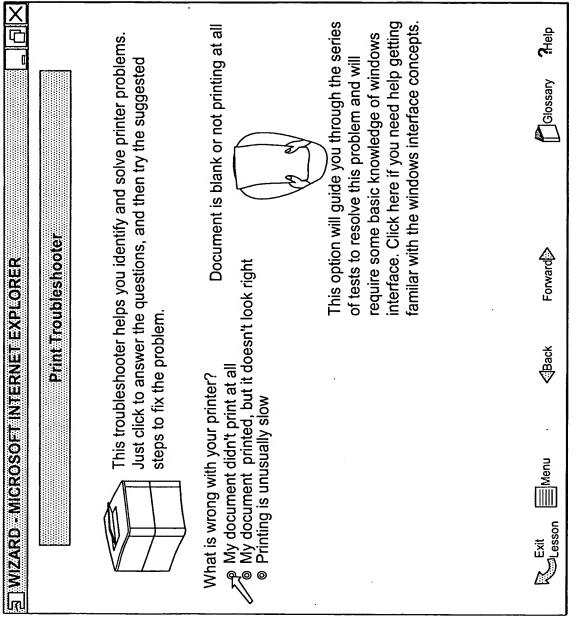
DEST AVAILABLE COPY



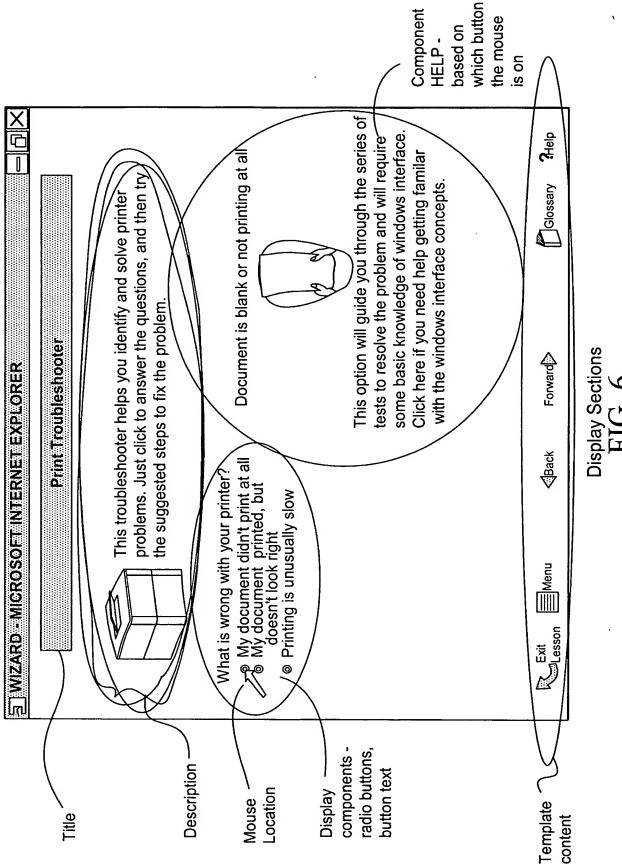
Node Example Details - Links and User Interface Specifications  $FIG.\ 2$ 



Reusable Process Definitions FIG. 3



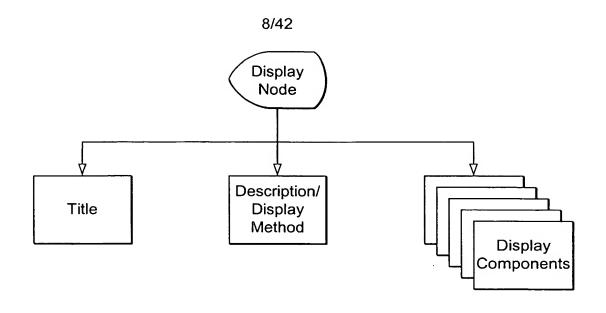
Sample Application Screen Shots  ${
m FIG.}~5$ 



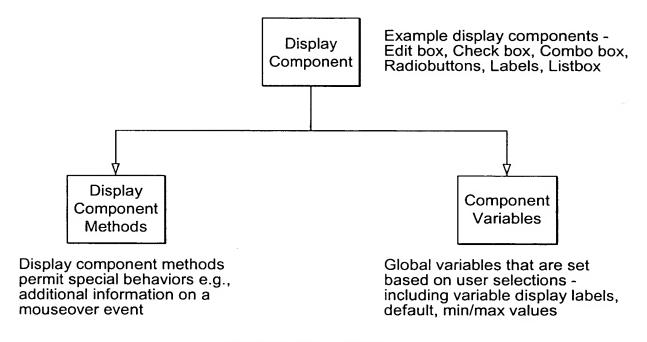
Display Sections FIG. 6

	The process node represents a complete process and contains global variables for the process
	The display node represents the logic to display titles, screen descriptions and display objects such as radio buttons, pull-down menus, checkboxes etc. The individual display objects may have a wide range of animated behaviors and may accept input that is stored in global variables.
	The purchase node represents the placing of a certain number of specific items for purchase on a shopping cart paradigm for later checkout. e.g., place a 4X CD-ROM, associated documentation and a software driver in the shopping cart
	The interface node represents the interaction with external applications using a pre-defined interface known as an API (application programming interface) e.g., issue a call to a relational database requesting records that match a certain criteria
	The computation node represents the computation of a variable using a formula e.g., A = B*3 + 4*D**2/5.4
$\Diamond$	Links represent the conditions under which a subsequent node will be executed e.g., A< 5 AND B >C

Node Types and Links

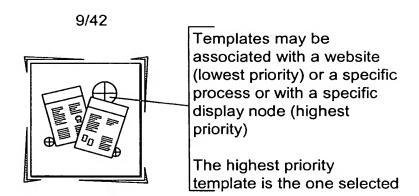


Display Node FIG. 8

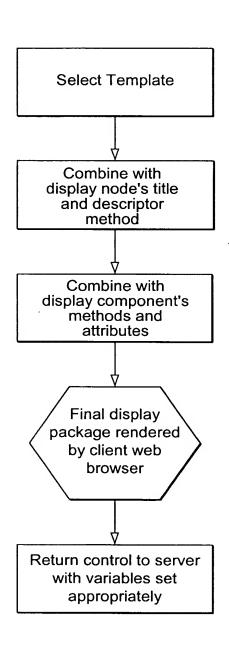


**Display Components** 

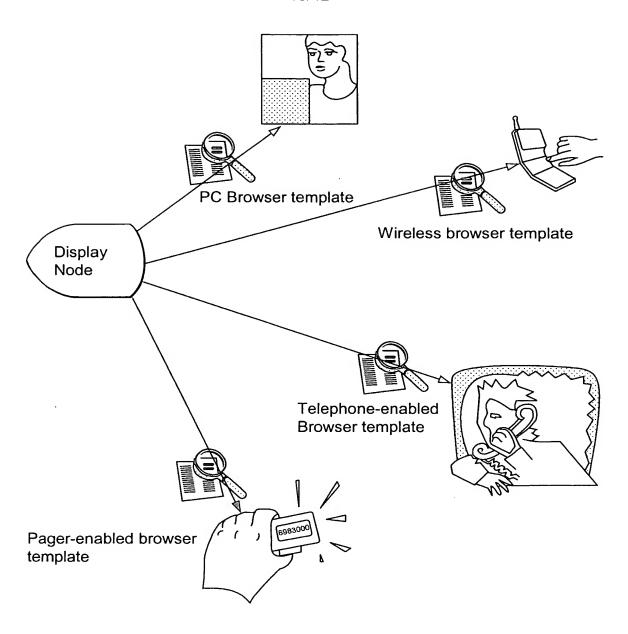
FIG. 9



Templates provide a means to define an overall look & feel for a specific screen display

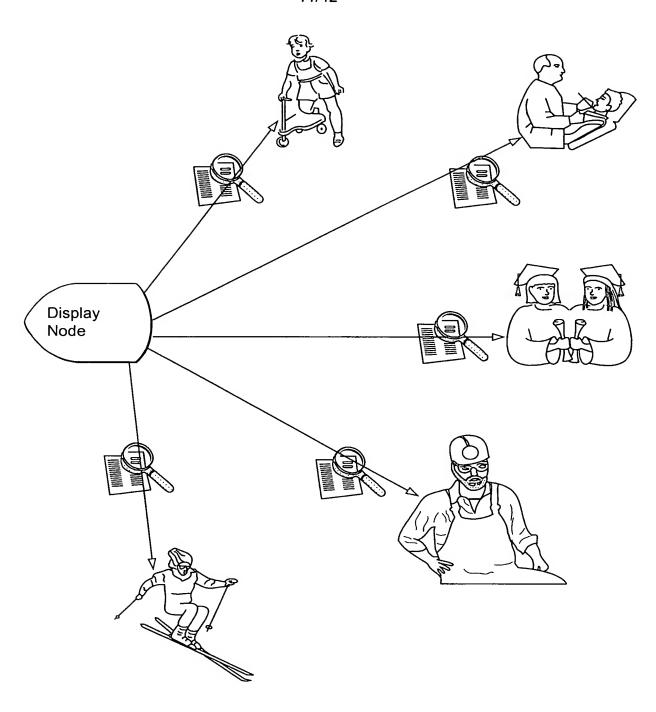


Dynamic display creation process



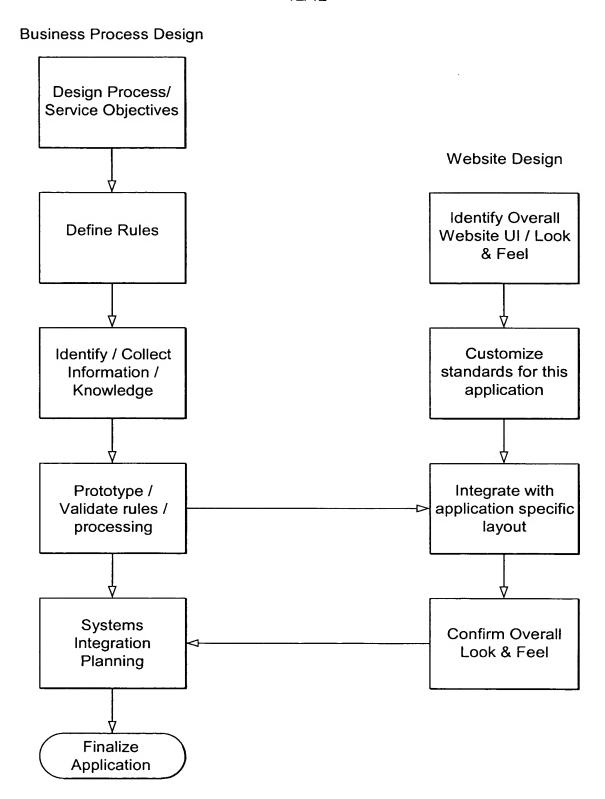
Template-enabled browser device independence

FIG. 11



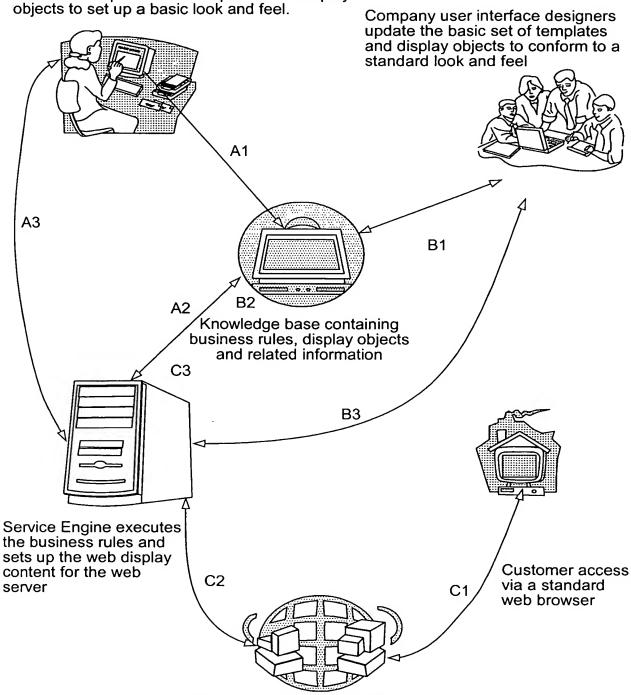
Template-enabled personalization of broswer user interface

FIG. 12



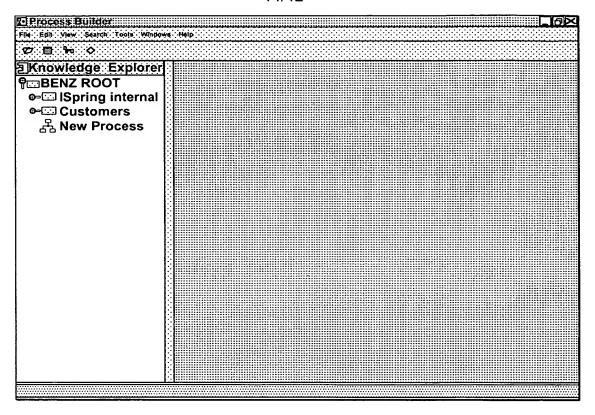
Overlapped Business Process Design and Website Design Methodology  $\mathbb{FIG}.\ 13$ 

Analyst uses a process design tool to layout the target business process and corresponding rules based on documentation and best practices. She uses a set of predefined templates and display abjects to set up a basic look and feel.

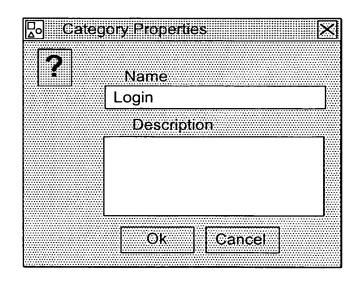


Web server connected to the Internet

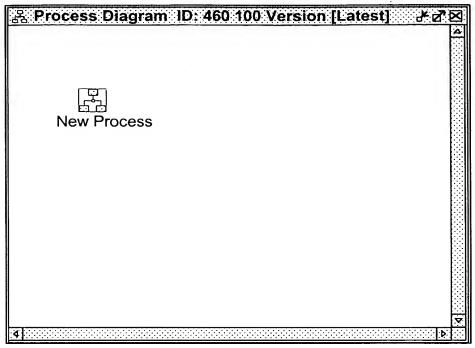
Information and Control Flow FIG. 14



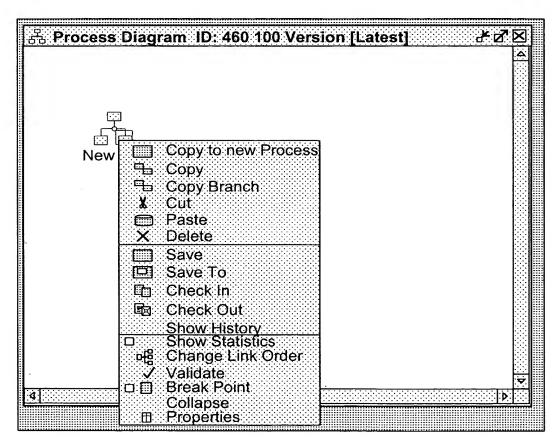
Opening Process Builder Screen  $FIG.\ 15$ 



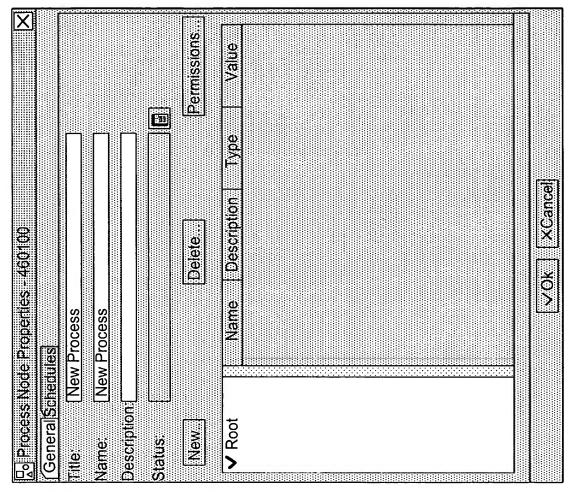
Category Properties FIG. 16



New Process Node FIG. 17



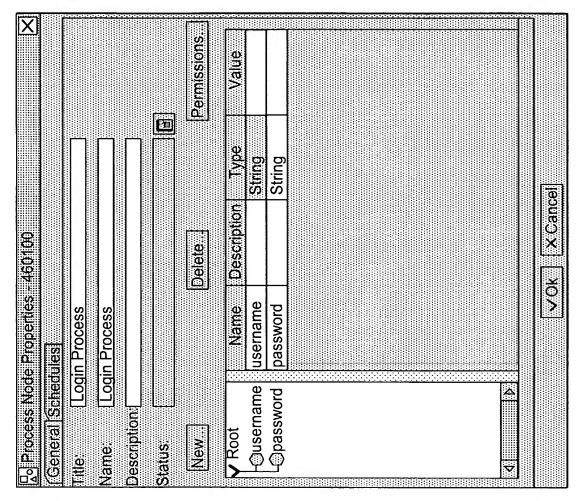
 $\begin{array}{c} \text{Checking Out A Process} \\ FIG.~18 \end{array}$ 



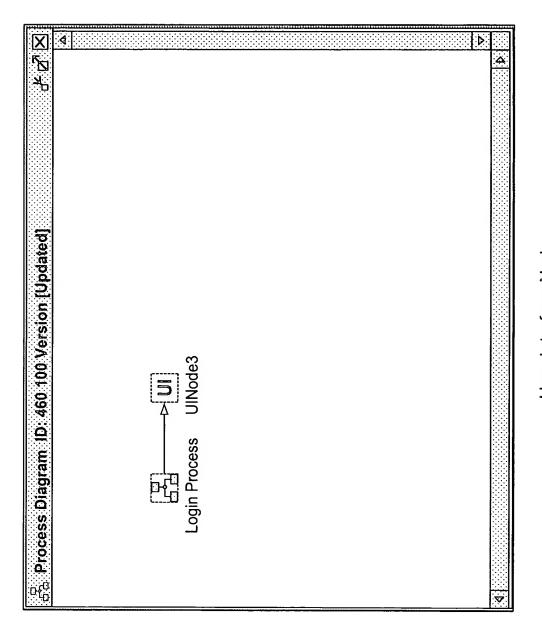
Process Node Properties FIG. 19

💫 Process Node Properties - 460/100	General Schedules	s Login Process	ne;[Login Process	Description:	Snn:	New Delete Permissions	A Root Name Description Type Value Username String Boolean Value Boolean Value Cong Cobject Cong Cobject Time Time Type Time Type Cobject Cong Cobject Type Time Type Cobject	<u>✓Ok</u> X.Cancel
N Prc	Gene	<u></u>	Name:	)escri	Status:	Nev	<b>Ç</b> ÕÖ	

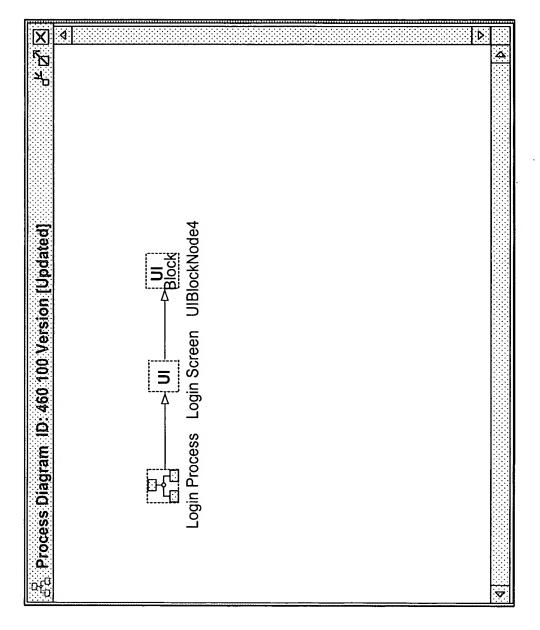
List of Variable Types  ${
m FIG.~20}$ 



Naming Variables  ${
m FIG.}~21$ 



User Interface Node FIG. 22



User Interface Block Node  $\mathbb{FIG}$ . 23

eneral Properties  Titl	e:: Login Cor	ntrols	<b>1</b>	
Nam	e: Login Cor	ntrols		
Description	n::			
-Selected Compo	— Compone	nt Chooser - Availabl Date DateTim	e Compon	ents
		DBList List Number		
		String		V
General Propertio	es Events			
Title: [	es Events			
	es Events I			
Title: [	es Events I			
Title [ Description: [	es Events			

User Interface Block Node Properties

FIG. 24

UIBlock Node Prope		14		×
General Properties				
Tit	le: Login C	ontrols		
Nam	e. Login C	ontrols		
Descriptio	n:			
Solooted Compa	— Çompor	nent Chooser	e Components	
Selected Compo	onents	Date DateTim DBList List Number String		
General Propertion	es[Events] UserName			
	Osemanie			
Description:				
Variable:	username		***	New
Selected Record:			<b>老</b> 大	New
UI Type:	TextBox		∀	
	✓Ok	× Cancel		

Component Definition Box, General Tab  $FIG.\ 25$ 

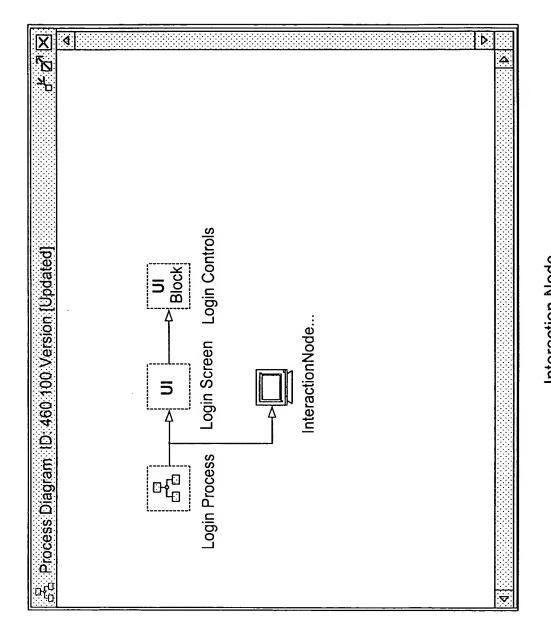
New Va	riah a	······································
	!:! <b>!-!!</b> ! <b></b>	/N
<del>!</del>	<del>^^^</del>	······································
	***************************************	
	***************************************	***************************************
	**************************************	······
	F	***************************************
	Enter Name:	
	1	
	1	***************************************
	······································	
·····		***************************************
	Ok   Can	cel
	***************************************	

Variable Definition Box, User Interface Block Node  $FIG.\ 26$ 

IBlock Node Properties - Seneral Properties	460114	<u> </u>
Title: Lo	gin Controls	
······································	gin Controls	
Description:		
	7	
	mponent Chooser Available Components	
-Selected Components	Date	
String	DateTime	
	DBList	
	List Number	
	String	$\neg \forall$
Q (		
General Properties Eve	nts	
Property	Value	
Align		
Background color		
Caption	User Name	
Caption position		
Caption suffix		
Enabled		
Font color		
Font face		
Font size		
Font style	***************************************	₩.

Component Definition Box, Properties Tab

FIG. 27



Interaction Node FIG. 28

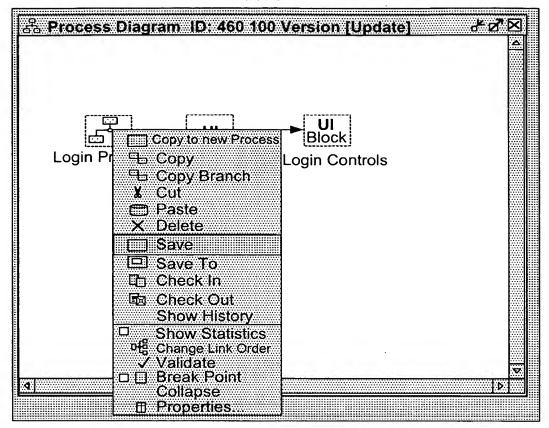
Interaction No General Pro	ode Properties - 460117 perties	×
Title:	Login Interaction	
Name:	Login Interaction	
Description:		
Ul Nodes		
Login Scre	en Add>> Login Screen	<b>1</b>
	Remove	U.
_Interface o		
Interface:	Frocess	71
Process:	Salad	Process
-Paramete		riocessi
· · · · · · · · · · · · · · · · · · ·	Process	
C	olumn Name   Variable	
		الا
	✓Ok X Cancel	

Selecting a User Interface Node

FIG. 29

Interaction Node Properties -	460117
General Properties	
Property	l Value
backbuttoncaption	
backbuttonimage	
backbuttonvisible	false
bgcolor	
caption	
captionbgcolor	
l captioncolor	
debug	
description	
email	
enabled	
fontcolor	
fontface	
fontsize fontstyle	
fontwieght	
keephistory	
nextbuttoncaption	
nextbuttonimage	
nextbuttonvisible	
requiredfieldindicator	
resetbuttonvisible	
template	MSTemplate
title	
<b>  ∨</b> 0	Ok X Cancel

Interaction Node's Properties

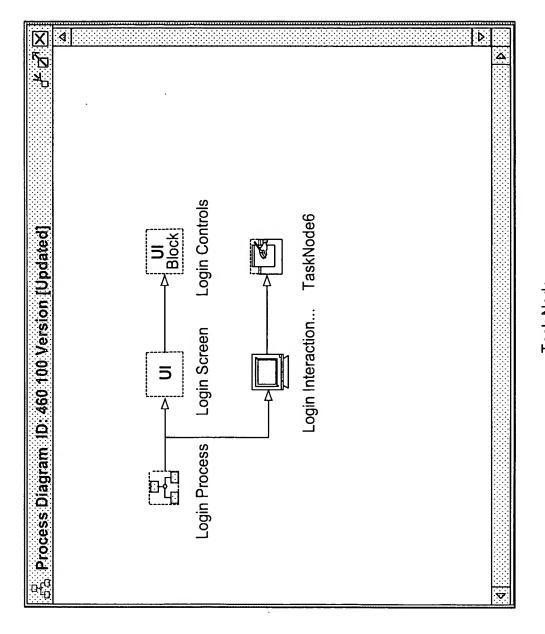


Process Node Menu, Save Process

## FIG. 31

②Interaction Nodes: Microsoft Internet Explorer	
ା ⇔Back • ⇒ • ୭ ାଡ଼ି ଶି ବ Search ⊑ Favorites @ History ଛ	ਰਿ ਅਤੇ
Address http://192.168.1.9/ispring/Default?handler=Start&processID=460100	♥   @ Go    Links
	<u></u>
	***
User Name	₩
Password	*****
1 435//014	*****
Next	******
	*****
	****
	*****
	**************************************
<b>4</b>	<b>D</b>
D Done I I I I ● Int	ernet
[	

Login Process URL, Basic Fields



Task Node

Task Node Pro	perties - 46012	7	×
Title: [	Verify Login		
Name: [	Verify Login		
Description: [			
⊢Task Steps –			
S	tep Name	Туре	New
			Edit :
			Delete
			Sequence
			4
<u> </u>			
	<u> </u>	× Cancel	

Task Node Properties

FIG. 34

General Advanced				
Name:	step name			
Туре:	Ψ.	]		
Interface:	Ā	]		

Step Definition Box

FIG. 35

Z=		===
General	Advanced	
Name:	verify against database	
	Database	1
		1
Interfac	6;	J
	✓ Ok X Cancel	

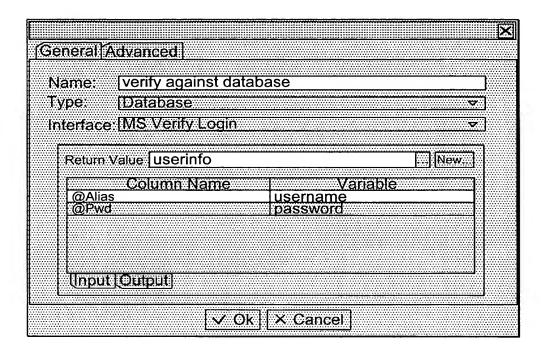
Selecting a Step Function

FIG. 36

V New
New
New
-

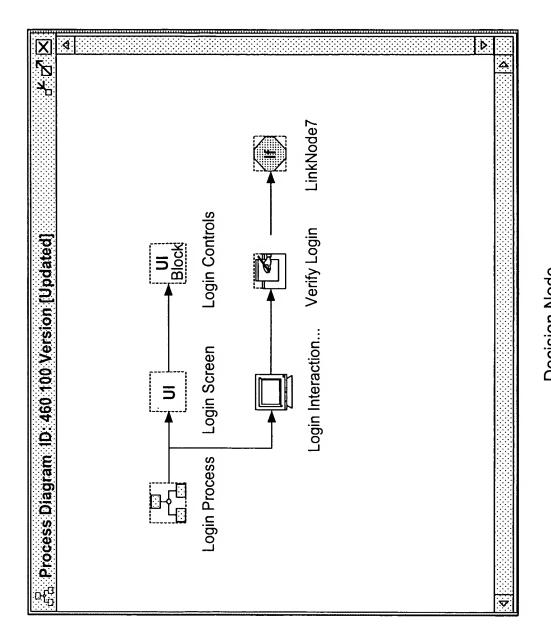
**Database Variable Interface Options** 

FIG. 37



Database Variables, Mapping Parameters

FIG. 38



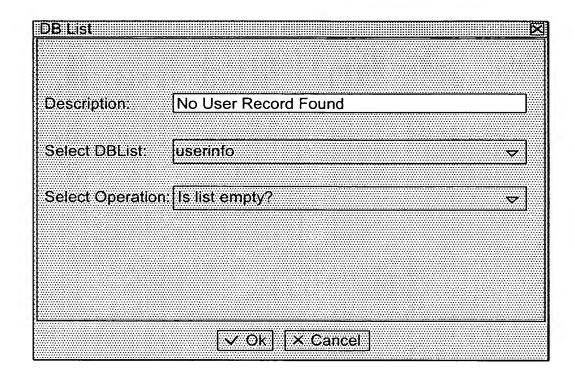
Decision Node FIG. 39

Link Node	Properties	×
General Pro	perties	
Title:	Invalid User	
Name:	Invalid User	
Description:		
# IF		
*** *** ***		
:::[		F
	✓Ok × Cancel	

Decision Node's Properties Dialog Box  $FIG.\ 40$ 

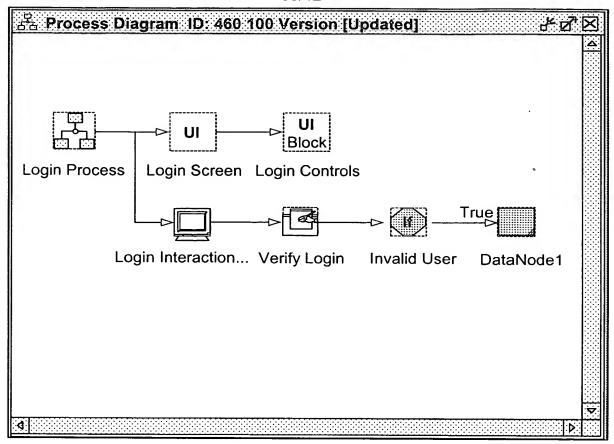
Wizard Name:	Description:
Script	Write Customer java Code
Set Conditions	Set Conditional expression
OB List	Operations on DB List
Node Properties	Set Node Properties
Node Component Properties	Set Node Component Properties
KML	XML
/ariable Functions	
OB Record	Operations on DB Record
Assign Expression	Assign Expression
Condition Revisited	Condition
	······································

**Decision Node Wizard Box** 



**DBList's Properties Dialog Box** 

FIG. 42



Data Node

FIG. 43

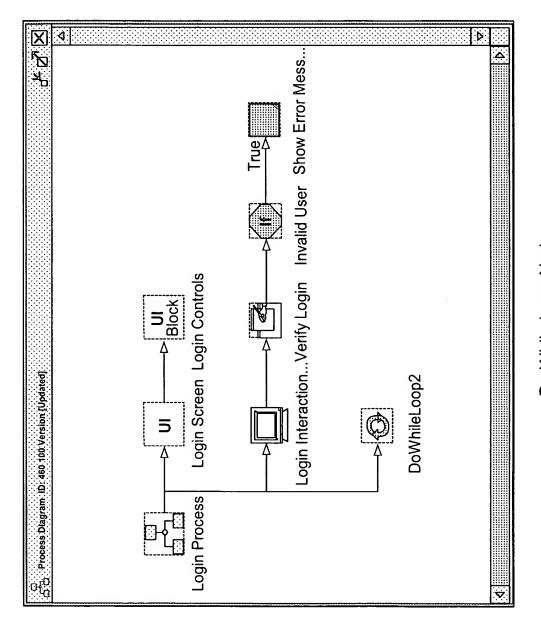
Wizard Name	Description:
Script	Write Customer java Code
Assign Variable	Assign Variable
DB List	Operations on DB List
Node Properties	Set Node Properties
Node Component Properties	Set Node Component Properties
XML	XML
Variable Functions	
DB Record	Operations on DB Record
Assign Expression	Assign Expression

Wizard Box

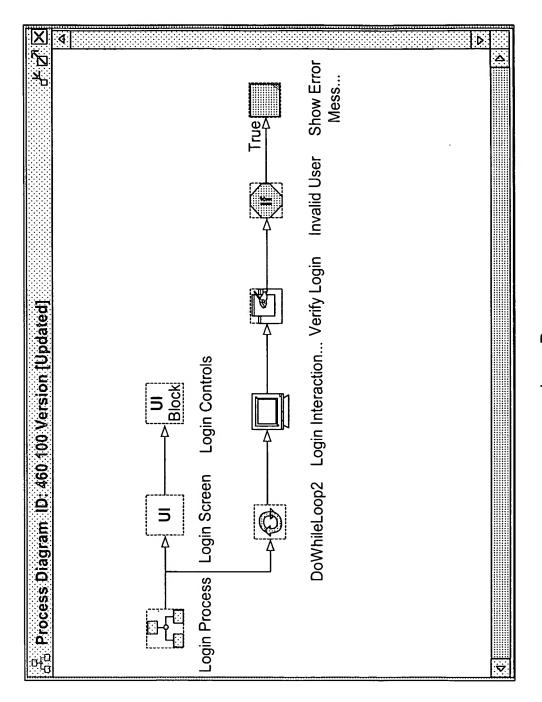
FIG. 44

Node Component Properties	X
Description   User Not Found Component	$\vdash$
Node Name Description	i i
Login Controls  Login Controls	I I
Logimmeraction VerifyLogin	I
Invaliduser ShowErrorMessage	T T
String - UserName	1
String - Password	
String: UserNotFound	
Property Value	_
임	l a
Caption	
Enabled	
Font color	
Font face	
	D
Apply	
✓ Ok X Cancel	

Node Components Properties Dialog Box FIG.~45



Do While Loop Node FIG.~46



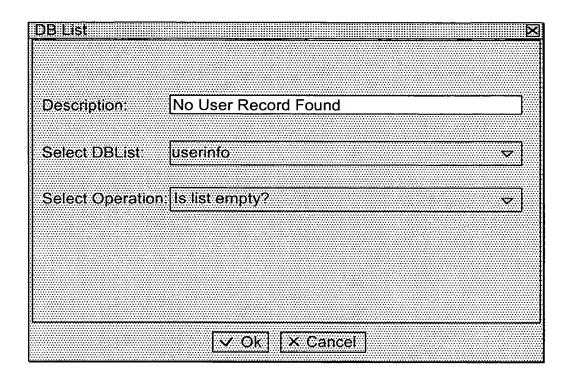
Loop Process FIG. 47

🖟 Do While N	lode Properties - 460165	×
General Pro	perties	
Title:	User Not Found	
Name:	User Not Found	
Description:		
DOWHILE		
	✓ Ok X Cancel	

Do While Loop Node's Properties Dialog Box  $FIG.\ 48$ 

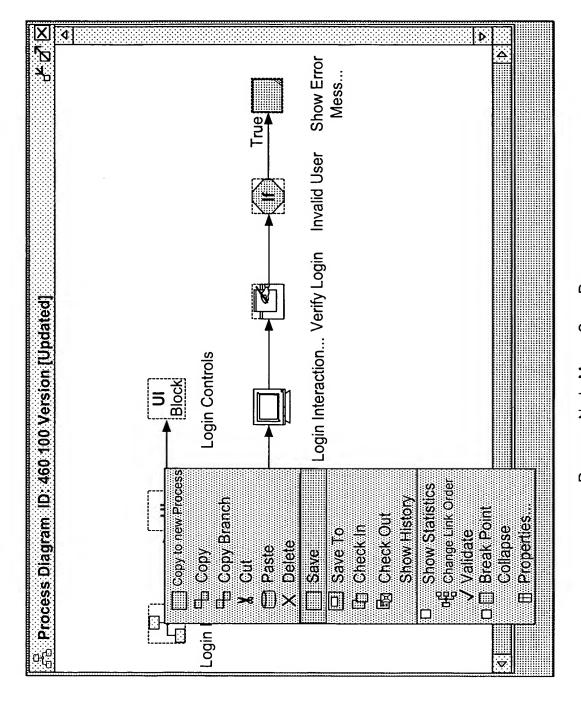
Wizard Name:	Description:
Script	Write Customer java Code
Set Conditions	Set conditional expression
DB List	Operations on DB List
Node Properties	Set Node Properties
Node Component Properties	Set Node Component Properties
XML	XML
Variable Functions	
DB Record	Operations on DB Record
Assign Expression	Assign Expression
Condition Revisited	Condition
••••••••••••••••••••••••••••••••	

Do While Loop Node Wizard Box



**DBList's Properties Dialog Box** 

FIG. 50



Process Node Menu, Save Process FIG. 51

② Interaction Nodes - Microsoft Internet Explorer    Files Edit View Favorites Tools Help   ← Back - → - ◎ ② 집 ② Search ☑ Favorites ❷ History ◎	
Address http://192.168.1.9/ispring/Default?handler=Start&processID=460100	♥ @Go   Links
User Name Password	
4	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
D Done □ □ □ Int	ernet

Login Process URL, Basic Fields

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